



NCS000397

STORMWATER MANAGEMENT PLAN

CITY OF NEWTON

NOVEMBER 22, 2019



Table of Contents

PART 1: INTRODUCTION	1
PART 2: CERTIFICATION	2
PART 3: MS4 INFORMATION	3
3.1 Permitted MS4 Area	3
3.2 Existing MS4 Mapping	4
3.3 Receiving Waters	5
3.4 MS4 Interconnection	5
3.5 Total Maximum Daily Loads (TMDLs)	6
3.6 Endangered and Threatened Species and Critical Habitat	6
3.7 Industrial Facility Discharges	7
3.8 Non-Stormwater Discharges	7
3.9 Target Pollutants and Sources	8
PART 4: STORMWATER MANAGEMENT PROGRAM ADMINISTRATION	10
4.1 Organizational Structure	10
4.2 Program Funding and Budget	12
4.3 Shared Responsibility	12
4.4 Co-Permittees	13
4.5 Measurable Goals for Program Administration	14
PART 5: PUBLIC EDUCATION AND OUTREACH PROGRAM	16
PART 6: PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM	21
PART 7: ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM	23
PART 8: CONSTRUCTION SITE RUNOFF CONTROL PROGRAM	28
PART 9: POST-CONSTRUCTION SITE RUNOFF CONTROL PROGRAM	30
PART 10: POLLUTION PREVENTION AND GOOD HOUSEKEEPING PROGRAMS	36

List of Tables

Table 1:	Summary of MS4 Mapping
Table 2:	Summary of MS4 Receiving Waters
Table 3:	Summary of Approved TMDLs
Table 4:	Summary of Federally Listed Species/Habitat Impacted by Surface Water Quality
Table 5:	NPDES Stormwater Permitted Industrial Facilities
Table 6:	Non-Stormwater Discharges
Table 7:	Summary of Target Pollutants and Sources
Table 8:	Summary of Responsible Parties
Table 9:	Shared Responsibilities
Table 10:	Co-Permittee Contact Information
Table 11:	Program Administration BMPs
Table 12:	Summary of Target Pollutants & Audiences
Table 13:	Public Education and Outreach BMPs
Table 14:	Public Involvement and Participation BMPs
Table 15:	Illicit Discharge Detection and Elimination BMPs
Table 16:	Qualifying Alternative Program Components for Construction Site Runoff Control Program
Table 17:	Construction Site Runoff Control BMPs
Table 18:	Qualifying Alternative Program(s) for Post-Construction Site Runoff Control Program
Table 19:	Summary of Existing Post-Construction Program Elements
Table 20:	Post Construction Site Runoff Control BMPs
Table 21:	Pollution Prevention and Good Housekeeping BMPs

PART 1: INTRODUCTION

The purpose of this Stormwater Management Plan (SWMP) is to establish and define the means by which the City of Newton will comply with its National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) Permit and the applicable provisions of the Clean Water Act to meet the federal standard of reducing pollutants in stormwater runoff to the maximum extent practicable.

This SWMP identifies the specific elements and minimum measures that the City of Newton will develop, implement, enforce, evaluate and report to the North Carolina Department of Environmental Quality (NCDEQ) Division of Energy, Minerals and Land Resources (DEMLR) in order to comply with the MS4 Permit number NCS000397, as issued by NCDEQ. This permit covers activities associated with the discharge of stormwater from the MS4 as owned and operated by the City of Newton and located within the corporate limits of the City of Newton.

In preparing this SWMP, the City of Newton has evaluated its MS4 and the permit requirements to develop a comprehensive 5-year SWMP that will meet the community's needs, address local water quality issues and provide the minimum measures necessary to comply with the permit. The SWMP will be evaluated and updated annually to ensure that the elements and minimum measures it contains continue to adequately provide for permit compliance and the community's needs.

Once the SWMP is approved by NCDEQ, all provisions contained and referenced in this SWMP, along with any approved modifications of the SWMP, are incorporated by reference into the permit and become enforceable parts of the permit.

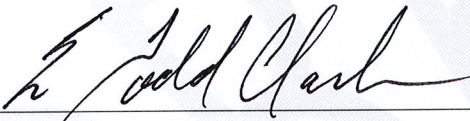
PART 2: CERTIFICATION

By my signature below I hereby certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

I am also aware that the contents of this document shall become an enforceable part of the NPDES MS4 Permit, and that both the Division and the Environmental Protection Agency have NPDES MS4 Permit compliance and enforcement authority.

- ☐ I am a principal executive officer or ranking elected official.
- ☐ I am a duly authorized representative and have attached the authorization made in writing by a principal executive officer or ranking elected official which specifies me as:
 - ☐ A specific individual having overall responsibility for stormwater matters.
 - ☐ A specific position having overall responsibility for stormwater matters.

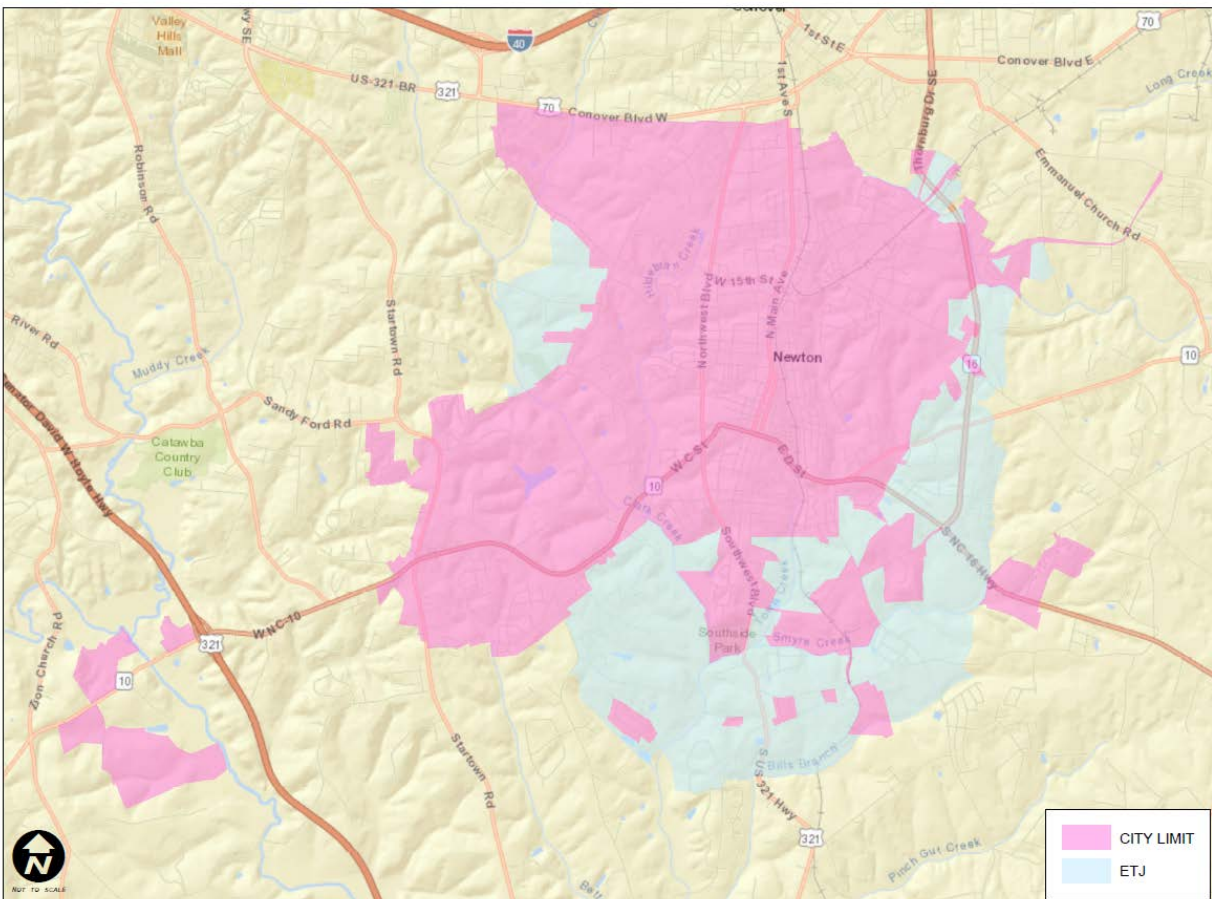
Signature:	
Name:	E. Todd Clark
Title:	City Manager
Signed this 22 nd day of November, 2019.	

PART 3: MS4 INFORMATION

3.1 Permitted MS4 Area

This SWMP applies throughout the corporate limits of the City of Newton, including all regulated activities associated with the discharge of stormwater from the MS4. The map below shows the corporate limits of City of Newton as of the date of this document.

City of Newton: City Limits & ETJ



3.2 Existing MS4 Mapping

The current MS4 mapping includes stormwater inflows, stormwater manholes, stormwater junction boxes, culvert drain pipes, stormwater discharges, and settling basins. The MS4 area has been mapped. However, previously unmapped stormwater infrastructure is still occasionally discovered. Stormwater inflows include information on material, diameter/box size, depth, and ground cover. Culvert drain pipes include information on diameter, box size, material, ground cover, and length. Stormwater discharges include information on material, diameter/box size, ground cover, and receiving stream. The stormwater discharges mapped include outfalls, but specific classification of major outfalls versus all other points of discharge has not occurred. Settling basins includes stormwater control measures (SCMs) and reports information including material, bank material, baffles, and weir information.

Table 1: Summary of MS4 Mapping

Percent of MS4 Area Mapped	95	%
No. of Major Outfalls* Mapped	unknown**	total

**An outfall is a point where the MS4 discharges from a pipe or other conveyance (e.g. a ditch) directly into surface waters. Major outfalls are required to be mapped to meet permit requirements. A major outfall is a 36-inch diameter pipe or discharge from a drainage area > 50-acres; and for industrial zoned areas a 12-inch diameter pipe or a drainage area \geq 2-acres.*

***Outfalls have been mapped but the classification of specific outfalls as major outfalls has not occurred, therefore the number of major outfalls is unknown at this time (See BMP No. 16).*

3.3 Receiving Waters

The City of Newton MS4 is located within the Catawba River Basin and discharges directly into receiving waters as listed in Table 2 below. Applicable water quality standards listed below are compiled from the following NCDEQ sources:

- [Waterbody Classification Map](#)
- [Impaired Waters and TMDL Map](#)
- Most recent NCDEQ Final [303\(d\) List](#)

Table 2: Summary of MS4 Receiving Waters

Receiving Water Name	Stream Index / AU Number	Water Quality Classification	303(d) Listed Parameter(s) of Interest
Betts Branch	11-129-5-6	C	
Bills Branch (Bili Branch)	11-129-5-5	C	
Clark Creek (Shooks Lake)	11-129-5-(0.3)b	C	Benthos (Nar, AL, FW)
Cline Creek	11-129-5-2	C	
Henry Fork	11-129-1-(12.5)	C	
Hildebran Creek (Anthony Creek)	11-129-5-3	C	
Jacob Fork	11-129-2-(9.5)	WS-III	
McLin Creek	11-76-5-(0.3) 11-76-5-(0.7)	C WS-IV	Benthos (Nar, AL, FW)
Smyre Creek	11-129-5-4-1	C	
South Fork Catawba River	11-129-(0.5)	WS-V	
Town Creek	11-129-5-4	C	

C – Class C (fishable/swimmable waters)

WS III/IV/V – Water Source

Benthos (Nar, AL, FW) – Narrative standard, aquatic life, fresh waters

Data from 2018 NC Category 5 Assessments “303(d) List” Final and NC Surface Water Classifications Map. From the 2018 303(d) Listing and Delisting Methodology for Benthos: “Narrative criterion: Waters shall be suitable for aquatic life propagation and maintenance of biological integrity. NC uses benthic and fish community data to assess biological integrity. Biological integrity means the ability of an aquatic ecosystem to support and maintain a balanced and indigenous community of organisms having species composition, diversity, population densities and functional organization similar to that of reference conditions”

3.4 MS4 Interconnection

The City of Newton MS4 is not interconnected with another regulated MS4 and directly discharges to the receiving waters as listed in Table 2 above.

3.5 Total Maximum Daily Loads (TMDLs)

The TMDL(s) listed in Table 3 below have been approved within the MS4 area, as determined by the map and list provided on the [NCDEQ Modeling & Assessment Unit web page](#). The table also indicates whether the approved TMDL has a specific stormwater Waste Load Allocation (WLA) for any watershed directly receiving discharges from the permitted MS4, and whether a Water Quality Recovery Program has been implemented to address the WLA.

Table 3: Summary of Approved TMDLs

Water Body Name	TMDL Pollutant(s)	Stormwater Waste Load Allocation (Y/N)	Water Quality Recovery Program (Y/N)
Statewide	Mercury	N	N

The Statewide TMDL for Mercury does not require any actions by the NPDES stormwater permittees because most mercury in stormwater comes from atmospheric deposition.

3.6 Endangered and Threatened Species and Critical Habitat

Significant populations of threatened or endangered species and/or critical habitat are identified within the regulated MS4 urbanized area, as determined by a review of the [Endangered and Threatened Species and Species of Concern by County for North Carolina Map](#) and [Listed species believe to or known to occur in North Carolina map](#) as provided by the [U.S. Fish and Wildlife Service](#). Of those species listed, Table 4 summarizes the species that may be significantly impacted by the quality of surface waters within their habitat.

Table 4: Summary of Federally Listed Species/Habitat Impacted by Surface Water Quality

Scientific Name	Common name	Species Group	Federal Listing Status
<i>Haliaeetus leucocephalus</i>	Bald eagle	Vertebrate	BGPA
<i>Hexastylis naniflora</i>	Dwarf-flowered heartleaf	Invertebrate vascular plant	T

BGPA – Bald and Golden Eagle Protection Act

T- Threatened

3.7 Industrial Facility Discharges

The City of Newton MS4 jurisdictional area includes the following industrial facilities which hold NPDES Industrial Stormwater Permits, as determined from the NCDEQ [Active NPDES Stormwater Permit List](#) and/or [Active Stormwater Permits Map](#).

Table 5: NPDES Stormwater Permitted Industrial Facilities

Permit Number	Facility Name
NCG020883	Catawba Clay Mine
NCG030314	Special Metals Welding Products Company
NCG030394	Commercial Fabricators Incorporated
NCG030535	Z.F. Chassis Components, LLC
NCG030626	ArcelorMittal Piedmont
NCG030642	GKN Driveline Newton LLC
NCG030686	Corning Optical Communications, LLC - Newton Cable Annex
NCG050047	Newton Division
NCG050175	International Paper-Newton Container Plant
NCG060158	Renwood Mills, LLC
NCG060298	Flowers Baking Company of Newton, LLC
NCG060307	Target Corp
NCG080399	SunBelt Furniture Xpress LLC
NCG080669	Newton City - Public Works Complex
NCG080868	FedEx Freight, Inc - HKY
NCG110033	Clark Creek WWTP
NCG120001	Catawba County Landfill
NCG180016	Lee Industries Incorporated-Catawba
NCG180213	Lee Industries Incorporated-Plant #3
NCG210384	Industrial Recycling Services

3.8 Non-Stormwater Discharges

The water quality impacts of non-stormwater discharges have been evaluated by the City of Newton as summarized in Table 6 below. The unpermitted non-stormwater flows listed as incidental do not significantly impact water quality. The City of Newton has evaluated residential and charity car washing for possible significant water quality impacts. Street cleaning is performed with a dry street sweeping process so street washing discharges are not relevant to the MS4.

The Division has not required that other non-stormwater flows be specifically controlled by the City of Newton.

Wash water associated with car washing that does not contain detergents or does not discharge directly into the MS4 is considered incidental. However, these types of non-stormwater discharges that do contain detergents have been evaluated by the City of Newton to determine whether they may significantly impact water quality. They were determined to be a possible cause of water quality impacts and will be addressed through public education efforts (See BMPs No. 5 and 7).

Table 6: Non-Stormwater Discharges

Non-Stormwater Discharge	Water Quality Impacts
Water line and fire hydrant flushing	Incidental
Landscape irrigation	Incidental
Diverted stream flows	Incidental
Rising groundwater	Incidental
Uncontaminated groundwater infiltration	Incidental
Uncontaminated pumped groundwater	Incidental
Uncontaminated potable water sources	Incidental
Foundation drains	Incidental
Air conditioning condensate	Incidental
Irrigation waters	Incidental
Springs	Incidental
Water from crawl space pumps	Incidental
Footing drains	Incidental
Lawn watering	Incidental
Residential and charity car washing	Possible
Flows from riparian habitats and wetlands	Incidental
Dechlorinated swimming pool discharges	Incidental
Street wash water	N/A
Flows from firefighting activities	Incidental

3.9 Target Pollutants and Sources

In addition to those target pollutants identified above, the City of Newton is not aware of other significant water quality issues within the permitted MS4 area.

Table 7 below summarizes the water quality pollutants identified throughout Part 3 of this SWMP, the likely activities/sources/targeted audiences attributed to each pollutant, and identifies the associated SWMP programs that address the target pollutants. In addition, the City of Newton has evaluated schools, homeowners and businesses as target audiences that are likely to have significant stormwater impacts. The schools were selected as a target audience due to the opportunity to affect positive change through education and involvement opportunities. Homeowners and businesses were identified as target audiences because they are likely sources of non-point pollution through uninformed management practices.

Table 7: Summary of Target Pollutants and Sources

Target Pollutant(s)	Likely Source(s)/Target Audience(s)	SWMP Program Addressing Target Pollutant(s)/Audience(s)
Litter	Residential, commercial, schools	Public Education & Outreach, Public Involvement & Participation
Yard Waste (leaves and grass clippings)	Residential, commercial	Public Education & Outreach, Pollution Prevention & Good Housekeeping
Sediment	Construction	Construction Site Runoff Control
Nutrients	Sewer overflows, failing septic systems, urbanization, schools	Public Education & Outreach, Illicit Discharge Detection & Elimination, Construction Site Runoff Control, Post-Construction Site Runoff Control, Pollution Prevention & Good Housekeeping
Fecal coliform	Sewer overflows, failing septic systems, wildlife, illicit discharges	Public Education & Outreach, Illicit Discharge Detection & Elimination
Mercury/statewide TMDL	Atmospheric deposition	Public Education & Outreach (fish consumption advisory)
Illicit discharges	Residential, commercial, industrial, municipal staff	Public Education & Outreach, Illicit Discharge Detection & Elimination,
Illegal dumping	Residential, commercial, industrial, municipal staff	Public Education & Outreach, Pollution Prevention & Good Housekeeping
Improper disposal of waste	Residential, commercial, industrial, municipal staff	Public Education & Outreach, Public Involvement & Participation, Pollution Prevention & Good Housekeeping
General non-point source pollution	Residential, commercial, schools, municipal staff	Public Education & Outreach

PART 4: STORMWATER MANAGEMENT PROGRAM ADMINISTRATION

4.1 Organizational Structure

The City of Newton stormwater program is implemented in partnership by primarily the Planning and Public Works departments. The Planning department is responsible for the public outreach and involvement components, as well as engineering plan reviews; while the Public Works department is responsible for good housekeeping and municipal pollution prevention activities, storm sewer system maintenance, and IDDE. The Assistant Planning Director is designated as the Stormwater Program Administrator.

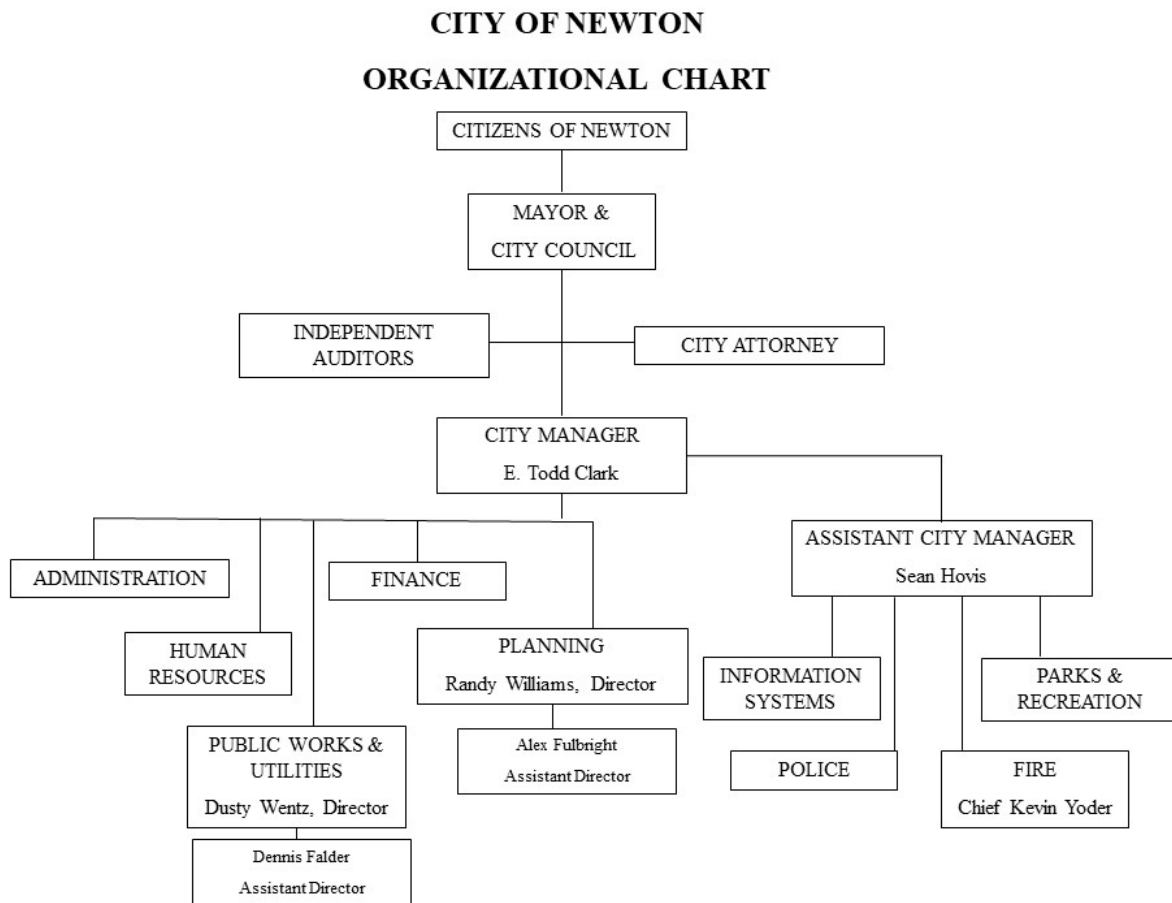


Table 8: Summary of Responsible Parties

SWMP Component	Responsible Position	Staff Name	Department
Stormwater Program Administration	Assistant Planning Director	Alex Fulbright	Planning
SWMP Management	Assistant Planning Director	Alex Fulbright	Planning
Public Education & Outreach	Assistant Planning Director	Alex Fulbright	Planning
Public Involvement & Participation	Assistant Planning Director	Alex Fulbright	Planning
Illicit Discharge Detection & Elimination	Assistant Public Works Director	Dennis Falder	Public Works
Construction Site Runoff Control	Assistant Planning Director	Alex Fulbright	Planning
Post-Construction Stormwater Management	Assistant Planning Director	Alex Fulbright	Planning
Pollution Prevention/Good Housekeeping for Municipal Operations	Assistant Public Works Director	Dennis Falder	Public Works
Municipal Facilities Operation & Maintenance Program	Assistant Public Works Director	Dennis Falder	Public Works
Spill Response Program	Fire Chief	Kevin Yoder	Fire Department
MS4 Operation & Maintenance Program	Assistant Public Works Director	Dennis Falder	Public Works
Municipal SCM Operation & Maintenance Program	Assistant Public Works Director	Dennis Falder	Public Works
Pesticide, Herbicide & Fertilizer Management Program	Assistant Public Works Director	Dennis Falder	Public Works

Vehicle & Equipment Cleaning Program	Assistant Public Works Director	Dennis Falder	Public Works
Pavement Management Program	Assistant Public Works Director	Dennis Falder	Public Works
Total Maximum Daily Load (TMDL) Requirements	Assistant Planning Director	Alex Fulbright	Planning

4.2 Program Funding and Budget

In accordance with the issued permit, the City of Newton shall maintain adequate funding and staffing to implement and manage the provisions of the SWMP and comply with the requirements of the NPDES MS4 Permit. The budget includes the permit administering and compliance fee, which is billed by the Division annually.

The stormwater program currently receives funding of approximately \$750,000 per year; this is funded primarily through general funds. However, the Assistant Public Works Director and Utilities Director positions are funded through the Public Works Enterprise fund. In total the program receives 2 full-time equivalent staff for pavement management (1 full time street sweeper position and a leaf collection crew seasonally (13 weeks)) and less than 0.5 dedicated full-time equivalent staff for other program components.

The program is currently under-funded to conduct all the proactive elements of the permit. Further fiscal analysis and investigation of funding options (such as additional general fund allocation or a stormwater fee) will be conducted as indicated in BMP No. 3 in order to fully fund the program by Permit year three.

4.3 Shared Responsibility

The City of Newton will share the responsibility to implement the following minimum control measures, which are at least as stringent as the corresponding NPDES MS4 Permit requirement. The City of Newton remains responsible for compliance if the other entity fails to perform the permit obligation and may be subject to enforcement action if neither the City of Newton nor the other entity fully performs the permit obligation. Table 9 below summarizes who will be implementing the component, what the component program is called, the specific SWMP BMP or permit requirement that is being met by the shared responsibility and whether or not a legal agreement to share responsibility is in place.

Table 9: Shared Responsibilities

SWMP BMP or Permit Reference	Implementing Entity & Program Name	Legal Agreement (Y/N)
3.2 Outreach to Targeted Audiences, 3.3.2 Volunteer Opportunities	WPCOG (See BMPs No. 4 and 15)	N
3.5 Construction Site Runoff Control Program	Catawba County Delegated SPCA Program	Y

4.4 Co-Permittees

There are no other entities applying for co-permittee status under the NPDES MS4 permit number NCS000397 for the City of Newton. Table 10 summarizes contact information for each co-permittee.

Table 10: Co-Permittee Contact Information

Co-Permittee MS4 Name	Contact Person	Phone & E-Mail	Interlocal Agreement (Y/N)
N/A			

4.5 Measurable Goals for Program Administration

The City of Newton will manage and report the following Best Management Practices (BMPs) for the administration of the Stormwater Management Program.

Table 11: Program Administration BMPs				
Permit Ref.	2.1.2 and Part 4: Annual Self-Assessment Measures to evaluate the performance and effectiveness of the SWMP program components at least annually. Results shall be used by the permittee to modify the program components as necessary to accomplish the intent of the Stormwater Program. The self-assessment reporting period is the fiscal year (July 1 – June 30).			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
1.	Annual Self-Assessment			
	Perform an annual evaluation of SWMP implementation, suitability of SWMP commitments and any proposed changes to the SWMP utilizing the NCDEQ Annual Self-Assessment Template.	1. Prepare, certify and submit the Annual Self-Assessment to NCDEQ prior to August 31 each year	1. Annually for permit years 1 – 4 (FY19/20 – FY22/23)	1. Annual Self-Assessment received by NCDEQ no later than August 31 each year
Permit Ref.	1.6: Permit Renewal Application Measures to submit a permit renewal application no later than 180 days prior to the expiration date of the NPDES MS4 permit.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
2.	Permit Renewal Application			
	Audit stormwater program implementation for compliance with the permit and approved SWMP, and utilize the results to prepare and submit a permit renewal application package.	1. Participate in a NPDES MS4 Permit Compliance Audit, as scheduled and performed by EPA or NCDEQ	1. TBD – Typically permit year 4	1. N/A
		2. Self-audit and document any stormwater program components not audited by EPA or NCDEQ utilizing the DEQ Audit Template	2. Permit year 5	2. Submit Self-Audit to DEMLR (required component of permit renewal application package)
		3. Certify and submit the stormwater permit renewal application (NOI, Self-Audit, and Draft SWMP for the next 5-year permit cycle)	3. Permit year 5	3. Permit renewal application package received by DEQ at least 180 days prior to permit expiration

Table 11: Program Administration BMPs

Permit Ref.	2.1.1: Adequate Funding and Staffing The permittee shall maintain adequate funding and staffing to implement and manage the provisions of the SWMP and meet all requirements of this permit			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
3.	Adequate funding			
	Perform a fiscal analysis and explore options to obtain adequate program funding to fully fund the stormwater program and meet all requirements of the permit. Select and implement a funding strategy for the Phase II Stormwater Program.	1. Complete a fiscal gap analysis	1. Permit year 1	1. Report monetary value of gap
		2. Determine available funding mechanisms and evaluate options	2. Permit year 1	2. Completed? - yes/no/status
		3. Select a funding mechanism	3. Permit years 1-2	3. Report funding mechanism selected
		4. Implement funding mechanism	4. Permit years 2-3	4. Implemented? - yes/no/status

PART 5: PUBLIC EDUCATION AND OUTREACH PROGRAM

The City of Newton will implement a Public Education and Outreach Program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and steps the public can take to reduce pollutants in storm water runoff.

The target audiences and identified pollutants listed in Part 3.9 of this SWMP, which will be addressed by the Public Education and Outreach Program, are summarized in Table 12 below. In addition, the City of Newton is required to inform businesses and the general public of the hazards associated with illicit discharges, illegal dumping and improper disposal of waste.

Table 12: Summary of Target Pollutants & Audiences

Target Pollutants/Sources	Target Audience(s)
Litter	Residential, commercial, schools
Yard Waste	Residential, commercial, municipal staff
Sediment	Construction
Nutrients	Residential, commercial, schools
Fecal coliform	Residential, commercial, schools
Mercury/statewide TMDL	Residential, commercial
Illicit discharges	Residential, commercial, industrial, municipal staff
Illegal dumping	Residential, commercial, industrial, municipal staff
Improper disposal of waste	Residential, commercial, industrial, municipal staff
General non-point source pollution	Residential, commercial, schools, municipal staff

Two existing city events, the Arbor Day Celebration held by the Parks and Recreation Department and Newton 101 Citizen's Academy for residents and business owners, will be used as a platform for stormwater outreach and education. The City will also develop a stormwater web page and use social media to reach younger generations and signage on City owned SCMs to reach stakeholders at the site of stormwater management. Additionally, the City of Newton plans to partner with the Western Piedmont Council of Governments (WPCOG) to more efficiently implement education and outreach activities. The City of Newton will manage, implement and report the following public education and outreach BMPs.

Table 13: Public Education and Outreach BMPs

Permit Ref.	3.2: Outreach to Targeted Audiences Measures to identify the specific elements and implementation of a Public Education and Outreach Program to share educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and how the public can reduce pollutants in stormwater runoff. The permittee shall document the extent of exposure of each media, event or activity, including those elements implemented locally or through a cooperative agreement.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
4.	Partnership with WPCOG			
	The City will engage with the WPCOG to develop Education and Outreach Initiatives that will be administered by WPCOG. Initiatives will focus on residential, commercial, and school audiences within the MS4 area.	1. Arrange partnership with WPCOG and establish legal agreement	1. Permit year 1	1. Report date established and terms of legal agreement
		2. Submit a partnership plan detailing specific commitments of the WPCOG partnership to NC DEQ for approval	2. Permit year 1	1. Report date plan is approved and include as enforceable amendment to SWMP
		3. Monitor WPCOG activities to ensure partnership commitments are met	3. Annually, following establishment of partnership	3. Yes/no/status
5.	City Sponsored Event or Festival			
	The City will distribute information on stormwater during at least one City sponsored event or festival a year such as the Arbor Day celebration, Folk Art Festival, or Soldiers Reunion.	1. Develop or identify one informational handout for distribution at the event that covers litter, nutrients, and non-point source pollution (including car washing)	1. Permit year 3	1. Is handout developed or identified? - yes/no/status
		2. Train municipal staff to man a stormwater booth during the event and distribute the above-mentioned flyers as well as information about leaky septic systems, illicit discharges/improper disposal of waste	2. Permit year 3	2. Report the number of staff members trained
		3. Man a booth at the one event/festival chosen and document the number of handouts distributed	3. Permit year 3, and annually thereafter	3. Report the chosen event and number of handouts distributed at event

Table 13: Public Education and Outreach BMPs

6.	Newton 101 Citizen's Academy			
	Information on Newton's stormwater program will be shared during Newton 101 Citizen's Academy, a program that tours all city departments once a year.	1. Train municipal staff to include stormwater program information during Newton 101 Citizen's Academy	1. Permit year 4	1. Report the number of staff members trained
		2. Present on stormwater program during Newton 101 Citizen's Academy	2. Permit years 4 and 5	2. Report the number of participants
7.	Social Media Campaign			
	The City's existing Facebook account will be used to reach the residential target audience and share information related to stormwater issues, with a minimum of one post per year.	1. Post about keeping yard waste and litter out of storm drains	1. Permit year 1	1. Report the date of the post
		2. Post about reducing fertilizer runoff	2. Permit year 2	2. Report the date of the post
		3. Post about car washing	3. Permit year 3	3. Report the date of the post
		4. Post about illicit discharge/illegal dumping	4. Permit year 4	4. Report the date of the post
		5. Post about stopping vehicle leaks	5. Permit year 5	5. Report the date of the post
8.	Add Signage to City-owned SCMs			
	Educational signage will be added to City-owned SCMs that are accessible by the public.	1. Locate City-owned SCMs and add them to the inventory (See BMPs No. 45 and No. 46)	1. See BMPs No. 45 and No. 46	1. See BMPs No. 45 and No. 46
		2. Develop educational signage that describes the use and function of SCMs, notes the stormwater hotline, and website	2. Permit year 4	2. Report the number of signs developed
		3. Add signage to accessible SCMs	3. Permit year 5	3. Report the number of signs installed

Table 13: Public Education and Outreach BMPs

Permit Ref.	2.1.7 and 3.2.3: Web Site Measures to provide a web site designed to convey the program's message and provide online materials including ordinances, or other regulatory mechanisms, or a list identifying the ordinances or other regulatory mechanisms, providing the legal authority necessary to implement and enforce the requirements of the permit			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
9.	Stormwater Page on City Website			
	The web page will provide information on the City's stormwater program, including the permit, SWMP, applicable ordinances, and annual reports. The web page will also include a stormwater issue reporting mechanism, educational materials developed by the City, and links to additional stormwater educational resources. The web page will also serve to advertise the stormwater hotline, Newton 101 Citizen's Academy, and opportunities for involvement.	1. Establish the stormwater web page	1. Permit year 1	1. Report the date the web page goes live, link to webpage
		2. Maintain the webpage - update any broken links, upload new educational material, upload most recent SWMP	2. Annually, once established	2. Report the date the web page is reviewed and updated as well as what updates are made
		3. Set a hit counter in order to monitor engagement	3. Annually, once web page is established	3. Report the number of hits
Permit Ref.	3.2.5: Stormwater Hotline Measures for a stormwater hotline/helpline for the purpose of public education and outreach.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
10.	Stormwater Hotline			
	A hotline will be maintained for citizens to ask stormwater questions and report stormwater issues.	1. Establish and maintain hotline phone number and responsible party	1. Permit year 1-5	1. Report the date the hotline is established in year 1 and if hotline is maintained (yes/no/status) in years 2-5
		2. Establish and train a responsible party to answer stormwater reporting mechanisms	2. Permit year 1	2. Report the date of training, and the dates any additional staff are trained

Table 13: Public Education and Outreach BMPs

		3. Train responsible parties in general stormwater knowledge, appropriate contacts for stormwater questions, and citizen opportunities within the stormwater program	3. Permit year 1	3. Report the date of training and the dates any additional staff are trained
		4. Publicize hotline in materials developed for the stormwater program and posting on stormwater web page	4. Permit year 1	4. Yes/no/status
		5. Establish a tracking mechanism to document the number and type of calls received	5. Permit year 1	5. Report the number and type of calls

PART 6: PUBLIC INVOLVEMENT AND PARTICIPATION PROGRAM

This SWMP identifies the minimum elements and implementation of a Public Involvement and Participation Program that complies with applicable State, Tribal and local public notice requirements. The planning commission will continue to function as the City's stormwater advisory board with the additional provision of a stormwater liaison to highlight stormwater issues. A stormwater hotline and a stormwater issue reporting mechanism on the webpage will be used to collect public input. The City will continue to coordinate with the city-wide clean up event to provide a volunteer opportunity to prevent litter from entering the stormwater system. The City of Newton will manage, implement and report the following public involvement and participation BMPs.

Table 14: Public Involvement and Participation BMPs

Permit Ref.	3.3.1: Public Input Mechanisms for public involvement that provide for input on stormwater issues and the stormwater program.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
11.	Planning Commission			
	City staff will bring stormwater issues before the planning commission to receive citizen input and factor stormwater into development decisions.	1. Include a bi-annual agenda item for City staff to report on stormwater concerns and receive input from the commission	1. Bi-annually, beginning in permit year 1	1. Date of meetings and stormwater topics discussed
12.	Stormwater Hotline			
	A hotline will be maintained for citizens to ask stormwater questions and report stormwater issues (See BMP No. 10).	1. See BMP No. 10	1. See BMP No. 10	1. See BMP No. 10
13.	Stormwater Page on City Website			
	The web page will provide links to information on the City's stormwater program, including the permit, SWMP, applicable ordinances, and annual reports. The web page will also include a stormwater issue reporting mechanism, educational materials developed by the City, and links to additional stormwater educational resources. The web page will also serve to advertise the stormwater hotline, Newton 101 Citizen's Academy, and opportunities for involvement (See BMP No. 9).	1. See BMP No. 9	1. See BMP No. 9	1. See BMP No. 9

Table 14: Public Involvement and Participation BMPs

Permit Ref.	3.3.2: Volunteer Opportunities Measures to provide volunteer opportunities designed to promote ongoing citizen participation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
14.	Annual City-Wide Clean-Up Event			
	As part of the annual City-wide clean-up event, organize volunteers to pick up trash or clean litter from public areas with potential to pollute stormwater.	1. Identify public areas that could be cleaned by volunteers	1. Permit year 1	1. Potential areas identified? – yes/no/status
		2. Coordinate clean-up of public areas	2. Annually, beginning in permit year 2	2. Report the number of participants and number of trash bags filled
15.	Partnership with WPCOG			
	The City will engage with the WPCOG to develop Volunteer Opportunities that will be administered by WPCOG. Opportunities will focus on residential, commercial, and school audiences within the MS4 area.	1. Arrange partnership with WPCOG	1. See BMP No. 4	1. See BMP No. 4
		2. Monitor WPCOG activities to ensure partnership commitments are being met	2. See BMP No. 4	2. See BMP No. 4

PART 7: ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM

The City of Newton will develop, manage, implement, document, report and enforce an Illicit Discharge Detection and Elimination Program (IDDE) which shall, at a minimum, include the following IDDE elimination BMPs. The existing IDDE Program plan will be revised and expanded in order to implement a complete program by permit year 5. The existing MS4 map includes all known pipes and structures but additional GIS analysis will be performed to classify outfalls as major outfalls, add flow directions, and receiving waters for a complete map.

Table 15: Illicit Discharge Detection and Elimination BMPs

Permit Ref.	3.4.1: MS4 Map Measures to develop, update and maintain a municipal storm sewer system map including stormwater conveyances, flow direction, major outfalls and waters of the United States receiving stormwater discharges.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
16.	Addition of Major Outfalls to MS4 Map			
	The MS4 map will be completed through GIS analysis of existing data. Major outfalls will be identified and numbered, and flow directions and receiving waters will be added.	1. Add a layer identifying major outfalls to the map and number	1. Permit year 3	1. Report number of major outfalls identified
		2. Add flow directions to the map	2. Permit year 3	2. Report when map is completed
		3. Add receiving waters to the map	3. Permit year 3	3. Report when map is completed
17.	Continual Updates to MS4 Map			
	The MS4 map will be continuously updated for completeness.	1. When new conveyances and outfalls are located or constructed add them to the map	1. Annually, once BMP No. 16 is completed	1. Report whether or not new outfalls were identified and if so, how many were identified during the permit year and how many have been identified over the permit term

Table 15: Illicit Discharge Detection and Elimination BMPs

Permit Ref.	3.4.2: Regulatory Mechanism Measures to provide an IDDE ordinance or other regulatory mechanism that provides legal authority to prohibit, detect, and eliminate illicit connections and discharges, illegal dumping and spills into the MS4, including enforcement procedures and actions.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
18.	Maintain Legal Authority			
	Review existing ordinance (Code of Ordinances, Chapter 87, Article VI. – Illicit Discharges) in order to maintain the legal authority to prohibit, detect, and eliminate illicit connections and discharges, illegal dumping and spills into the MS4, including enforcement procedures and actions. Update ordinance if required.	1. Review ordinance and update if revision is required to maintain legal authority	1. Permit year 1	1. Report if a revision is required and if a revision is made
Permit Ref.	3.4.3: IDDE Plan Measures to maintain and implement a written IDDE Plan to detect and address illicit discharges, illegal dumping and any non-stormwater discharges identified as significant contributors of pollutants to the MS4. The plan shall provide standard procedures and documentation to: <ul style="list-style-type: none"> a) Locate priority areas likely to have illicit discharges, b) Conduct routine dry weather outfall inspections, c) Identify illicit discharges and trace sources, d) Eliminate the source(s) of an illicit discharge, and e) Evaluate and assess the IDDE Program. 			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
19.	Outfall Inspections			
	Perform regular dry weather (no rain in previous 72 hours) outfall inspections to proactively identify illicit discharges and illicit connections.	1. Train inspections staff to perform dry weather outfall inspections and illicit discharge investigations	1. See BMP No. 23	1. See BMP No. 23

Table 15: Illicit Discharge Detection and Elimination BMPs

		2. Split major outfalls into five equal groups for inspection; so that with one group inspected per year, all major outfalls will be inspected over a five-year period	2. Permit year 3, in conjunction with MS4 map update (BMP No. 16)	2. Yes/no/status
		3. Inspect one group (see BMP No. 19.2) of outfalls annually in dry weather conditions and document any potential violations using the forms and procedure developed in BMP No. 22	3. Annually, beginning in permit year 4	3. Number of outfalls inspected and number of potential illicit discharges identified
20.	Illicit Discharge Identification Procedure			
	Revise and maintain a standard operating procedure (SOP) for investigation of potential illicit discharges, illicit connections, and illegal dumping.	1. Revise the IDDE program from the previous SWMP to develop a SOP for investigating potential illicit discharges and connections	1. Permit year 1	1. Completed? - yes/no/status
		2. Maintain a written IDDE program	2. Continuously	2. Yes/no/status
21.	IDDE Program Evaluation			
	Yearly evaluation of IDDE program to promote continuance of effective components and improvement in areas that are lacking, as well as, identification of potential “hot-spot” areas.	1. Evaluation meeting with IDDE program stakeholders; to include at least Stormwater Administrator and Utilities Director	1. Annually, in conjunction with Annual Assessment	1. Report any proposed changes
		2. Review of IDDE reports and identification of chronic violators, issues, and/or “hot-spot” areas	2. Annually, in conjunction with Annual Assessment	2. Report the number of potential illicit discharges found, the number of illicit discharges verified, the number of illicit discharges resolved/removed and enforcement actions taken

Table 15: Illicit Discharge Detection and Elimination BMPs

Permit Ref.	3.4.4: IDDE Tracking Measures for tracking and documenting the date(s) an illicit discharge, illicit connection or illegal dumping was observed, the results of the investigation, any follow-up of the investigation, the date the investigation was closed, the issuance of enforcement actions, and the ability to identify chronic violators.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
22.	Database Tracking System			
	A tracking system for observed IDDE violations and follow-on actions will be developed and implemented in order to identify “hot-spot” areas, chronic violators, and recurring issues. (To be used during BMP No. 19.3)	1. Develop a “Potential Illicit Discharge Report” form to include observed illicit discharge indicators, date, location, and contacts made	1. Permit year 1	1. Yes/no/status
		2. Develop a tracking spreadsheet to collect data from “Potential Illicit Discharge Report” as well as the results of the investigation, any follow-up, date of closure, and enforcement actions taken	2. Permit year 1	2. Yes/no/status
Permit Ref.	3.4.5: Staff IDDE Training Measures to provide training for municipal staff and contractors who, as part of their normal job responsibilities, may come into contact with or otherwise observe an illicit discharge, illicit connection or illegal dumping. Training shall include identifying and reporting illicit discharges, illicit connections and illegal dumping. Each staff training event shall be documented, including the agenda/materials, date, and number of staff participating.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
23.	Staff Training			
	Develop a program to educate City staff of indicators of potential illicit discharges/connections and illegal dumping and the appropriate avenues through which to report suspected illicit discharge. (See BMP No. 20 for SOPs by which to train staff)	1. Identify or develop staff training program for public works employees	1. Permit year 2	1. Yes/no/status
		2. Train staff with Illicit Discharge & Detection responsibilities or the potential to discover an illicit discharge during routine work activities	2. Permit year 2	2. Report topics, training date, and number of attendees
		3. Train new staff that will be part of the IDDE program	3. Annually, beginning in permit year 3	3. Report topics, training date, and number of attendees

Table 15: Illicit Discharge Detection and Elimination BMPs

24.	Fact Sheets			
	Hang fact sheet posters in employee common areas to serve as a reminder of the basics on identifying and reporting illicit discharges, connections, and dumping.	1. Identify or develop illicit discharge fact sheet posters to display	1. Permit year 2	1. Yes/no/status
		2. Display posters in employee common areas	2. Annually, beginning in permit year 2	2. Number of posters hung
Permit Ref.	3.4.6: IDDE Reporting Measures for the public and staff to report illicit discharges, illegal dumping and spills. The mechanism shall be publicized to facilitate reporting and shall be managed to provide rapid response by appropriately trained personnel.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
25.	Stormwater Hotline			
	A hotline will be maintained for citizens to ask stormwater questions and report stormwater issues. (See BMP No. 10)	1. See BMP No. 10	1. See BMP No. 10	1. See BMP No. 10
26.	Stormwater Page on City Website			
	The web page will provide links to information on the City's stormwater program, including the permit, SWMP, applicable ordinances, and annual reports. The web page will also include a stormwater issue reporting mechanism, educational materials developed by the City, and links to additional stormwater educational resources. The web page will also serve to advertise the stormwater hotline, Newton 101 Citizen's Academy, and opportunities for involvement. (See BMP No. 9)	1. See BMP No. 9	1. See BMP No. 9	1. See BMP No. 9

PART 8: CONSTRUCTION SITE RUNOFF CONTROL PROGRAM

In accordance with 15A NCAC 02H .0153, the City of Newton relies upon the North Carolina Sedimentation Pollution Control Act (SPCA) of 1973 and the NCG010000 permit for construction activities as qualifying alternative programs to meet the NPDES MS4 Permit requirements for all construction site runoff control measures to reduce pollutants in stormwater runoff from construction activities that result in land disturbance of greater than or equal to one acre and any construction activity that is part of a larger common plan of development that would disturb one acre or more.

Table 16: Qualifying Alternative Program Components for Construction Site Runoff Control Program

Permit Reference	State or Local Program Name	Legal Authority	Implementing Entity	Meets Whole or Part of Requirement
3.5.1 - 3.5.4	Catawba County Delegated SPCA Program*	15A NCAC Chapter 04, Interlocal Agreement for Enforcement Services of Catawba County Soil Erosion and Sediment Control Ordinance	Catawba County	Whole

* The local delegated SPCA Program ordinance(s)/regulatory mechanism(s) can be found at:

https://library.municode.com/nc/catawba_county/codes/code_of_ordinances?nodeId=COOR_CH31SOERSECO

In addition to the delegated SPCA Program, opportunities for public input through the stormwater hotline and additional waste management requirements for construction site operators complete the construction site runoff control program. The City of Newton also implements the following BMPs to meet NPDES MS4 Permit requirements.

Table 17: Construction Site Runoff Control BMPs				
Permit Ref.	3.5.6: Public Input Measures to provide and promote a means for the public to notify the appropriate authorities of observed erosion and sedimentation problems.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
27.	Municipal Staff Training			
	Train municipal staff who receive calls from the public on the protocols for referral and tracking of construction site runoff control complaints.	1. Train municipal staff on proper handling of construction site runoff control complaints	1. Annually	1. Report number of staff trained, training dates and topics covered

Table 17: Construction Site Runoff Control BMPs

28.	Stormwater Hotline			
	A hotline will be maintained for citizens to ask stormwater questions and report stormwater issues (See BMP No. 10).	1. See BMP No. 10	1. See BMP No. 10	1. See BMP No. 10
Permit Ref.	3.5.5: Waste Management Measures to require construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impact to water quality.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
29.	Establish and Maintain Legal Authority			
	Develop and implement an ordinance to require construction site operators to control waste.	1. Pass code	1. Permit year 1	1. Yes/no/status
		2. Maintain legal authority	2. Continuously, after ordinance is adopted	2. Yes/no/status
30.	Contractor Education			
	Communicate new waste management requirements to construction site operators.	1. Identify/develop fact sheet to share at pre-construction meetings	1. Permit year 1, after ordinance is adopted	1. Yes/no/status
		2. Add fact sheet to website	2. Permit year 1, after ordinance is adopted	2. Yes/no/status
		2. Distribute fact sheet at pre-construction meetings	2. Permit year 1, after ordinance is adopted	2. Number of fact sheets distributed

PART 9: POST-CONSTRUCTION SITE RUNOFF CONTROL PROGRAM

This SWMP identifies the minimum elements to develop, implement and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that are located within the City of Newton and discharge into the MS4. These elements are designed to minimize water quality impacts utilizing a combination of SCMs and/or non-structural BMPs appropriate for the community, and ensure adequate long-term operation and maintenance of SCMs.

In accordance with 15A NCAC 02H .0153 and .1017, the City of Newton implements the following State post-construction program requirements, which satisfy the NPDES Phase II MS4 post-construction site runoff control requirements as Qualifying Alternative Programs (QAPs) in the MS4 area(s) where they are implemented.

Table 18: Qualifying Alternative Program(s) for Post-Construction Site Runoff Control Program

State QAP Name	State Requirements	Local Ordinance / Regulatory Mechanism Reference
None	N/A	N/A

The City of Newton has existing requirements other than Qualifying Alternative Programs for implementation of the NPDES Phase II MS4 post-construction program requirements. These existing requirements are codified in local ordinances, and implementation is further defined in guidance, manuals and/or SOPs as summarized in Table 19 below.

Table 19: Summary of Existing Post-Construction Program Elements

Permit Requirements for Plan Review and Approval	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.2(a) Authority	City of Newton Code of Ordinances - Chapter 87	6-19-2007(effective July 1,2007)
3.6.3(a) & 15A NCAC 02H.0153(c) Federal, State & Local Projects	City of Newton Code of Ordinances - Chapter 87-5	6-19-2007
3.6.3(b) Plan Review	City of Newton Code of Ordinances - Chapter 87	6-19-2007
3.6.3(c) O&M Agreement	City of Newton Code of Ordinances - Chapter 87-24 a	6-19-2007
3.6.3(d) O&M Plan		
3.6.3(e) Deed Restrictions/Covenants	City of Newton Code of Ordinances - Chapter 87-18 c, 87 -19f	6-19-2007
3.6.3(f) Access Easements	City of Newton Code of Ordinances - Chapter 87-30	6-19-2007
Permit Requirements for Inspections and Enforcement	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.2(b) Documentation	City of Newton Code of Ordinances - Chapter 87-28	6-19-2007
3.6.2(c) Right of Entry	City of Newton Code of Ordinances - Chapter 87-24 a, 87-24 b 5, 87-25	6-19-2007
3.6.4(a) Pre-CO Inspections	City of Newton Code of Ordinances - Chapter 87-14 d	6-19-2007
3.6.4(b) Compliance with Plans	City of Newton Code of Ordinances - Chapter 87-14 c	6-19-2007
3.6.4(c) Annual SCM Inspections	City of Newton Code of Ordinances - Chapter 87-23.b	6-19-2007
3.6.4(d) Low-density Inspections		
3.6.4(e) Qualified Professional	City of Newton Code of Ordinances - Chapter 87-23 b	6-19-2007
Permit Requirements for Fecal Coliform Reduction	Municipal Ordinance/Code Reference(s) and/or Document Title(s)	Date Adopted
3.6.6(a) Pet Waste	City of Newton Code of Ordinances – Chapter 14 –Sec. 14-101 (7)	9-18-2002
3.6.6(b) On-Site Domestic Wastewater Treatment	Catawba County Code of Ordinances – Chapter 16, Article IV	1995 Code
	Catawba County Environmental Health Application, Evaluation, and Permitting Procedures For Septic Systems and Well Construction	July 1, 2005

The City of Newton will first establish the legal authority to require O&M Plans and perform post-construction inspection of low-density sites. Then the City will exercise that authority through the enforcement, inspection, and documentation of the full post construction program. The annual reporting metrics for the post construction program are provided in Table 20: Post Construction Site Runoff Control BMPs below.

Table 20: Post Construction Site Runoff Control BMPs				
Permit Ref.	4.1.3: Minimum Post-Construction Reporting Requirements Measures to document activities over the course of the fiscal year (July 1 – June 30) including appropriate information to accurately describe progress, status, and results.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
31.	Standard Reporting			
	Implement standardized tracking, documentation, inspections and reporting mechanisms to compile appropriate data for the annual self-assessment process. Data shall be provided for each Post-Construction/Qualifying Alternative Program being implemented as listed in Tables 18 and 19 (See BMP No. 36).	1. Track number of low-density and high-density plan reviews performed	1. Continuously	1. Number of plan reviews performed for low-density and high-density
		2. Track number of low-density and high-density plans approved	2. Continuously	2. Number of plan approvals issued for low-density and high-density
		3. Maintain a current inventory of low-density projects and constructed SCMs including SCM type or low-density acreage, location and last inspection date	3. Continuously, following establishment of inventory	3. Summary of number and type of SCMs added to the inventory and in total; and number and acreage of low-density projects constructed and in total
		4. Track number of SCM inspections performed	4. Continuously, beginning in permit year 4	4. Number of SCM inspections
		5. Track number of low-density inspections performed	5. Continuously, beginning in permit year 4	5. Number of low-density inspections
		6. Track number and type of enforcement actions taken	6. Continuously	6. Number and type of enforcement actions taken

Table 20: Post Construction Site Runoff Control BMPs

Permit Ref.	3.6.2: Legal Authority Measures to maintain adequate legal authorities through ordinance or other regulatory mechanism to: (a) review designs and proposals for new development and redevelopment to determine whether adequate stormwater control measures will be installed, implemented, and maintained, (b) request information such as stormwater plans, inspection reports, monitoring results, and other information deemed necessary to evaluate compliance with the Post-Construction Stormwater Management Program, and (c) enter private property for the purpose of inspecting at reasonable times any facilities, equipment, practices, or operations related to stormwater discharges to determine whether there is compliance with the Post-Construction Stormwater Management Program.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
	This permit requirement is fully met by the existing post-construction program, see references provided in Table 19			
Permit Ref.	3.6.3: Plan Review and Approval Measures to maintain plan review and approval authority, standards and procedures to: (a) Require Federal, State, and local government projects to comply with Post-Construction Program requirements throughout the entire MS4 permitted area, unless the entity is subject to its own NPDES MS4 permit or a qualifying alternative program, (b) Conduct site plan reviews of all new development and redeveloped sites that disturb greater than or equal to one acre, and sites that disturb less than one acre that are part of a larger common plan of development or sale for compliance with 15A NCAC 02H .1017 and the qualifying alternative programs that apply within your jurisdiction, (c) Ensure that each project has an Operation and Maintenance Agreement that complies with 15A NCAC 02H .1050(12), (d) Ensure that each project has an Operation and Maintenance Plan that complies with 15A NCAC 02H .1050(13), (e) Ensure that each project has recorded deed restrictions and protective covenants, that require the project to be maintained consistent with approved plans, and (f) Ensure that each SCM and associated maintenance accesses be protected in a permanent recorded easement per 15A NCAC 02H 1050 (9) and (10).			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
32.	Revisions to Code of Ordinances			
	Revise existing ordinance to specifically require compliance by Federal, State, and Local government projects and revise reference to stormwater design manual to specify NCDEQ Stormwater Design manual.	1. Revise code to require Federal, State, and local government projects to comply with post construction requirements unless subject to its own NPDES MS4 permit or qualifying alternative program	1. Permit year 2	1. Report code reference and date adopted
		2. Revise code to specify NCDEQ Stormwater Design Manual as the reference stormwater design manual	2. Permit year 2	2. Report code reference and date adopted

Table 20: Post Construction Site Runoff Control BMPs

33.	O&M Plan			
	Add an ordinance to the City code requiring each stormwater control measure to have an Operation and Maintenance Plan that complies with 15A NCAC 02H .1050(13)	1. Establish legal authority through code revision	1. Permit year 2	1. Report code reference and date adopted
		2. Enforcement of new code by requiring approval of O&M Plan by Stormwater Administrator prior to plan approval	2. Continuously, after ordinance is adopted.	2. Number of O&M plans approved
Permit Ref.	3.6.4: Inspections and Enforcement Measures to maintain inspection and enforcement authority, standards and procedures to: (a) Conduct post-construction inspections prior to issuing a Certificate of Occupancy or a Temporary Certificate of Occupancy. Alternatively, the project owner may provide a surety bond to guarantee compliance with the approved plan(s), (b) Ensure that the project has been constructed in accordance with the approved plan(s), (c) Ensure annual inspection of each permitted SCM to ensure compliance with the approved Operation and Maintenance Agreement, (d) Ensure inspection of low-density projects at least once during the permit term, and (e) Require that inspections be conducted by a qualified professional.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
34.	Inspection of low-density projects			
	Establish the legal authority for inspection of low-density projects at least once during the permit term; and carry out the inspections.	1. Establish legal authority through code revision	1. Permit year 2	1. Report code reference and date adopted
		2. Conduct inspection of 20% of low-density projects each year (See BMP No. 31.5)	2. See BMP No. 31.5	2. See BMP No. 31.5
Permit Ref.	3.6.5: Documentation Measures to maintain adequate documentation and standardized inspection and tracking mechanisms to: (a) Maintain an inventory of post-construction SCMs and low-density projects, (b) Document, track and maintain records of inspections and enforcement actions. Tracking shall include the ability to identify chronic violators, and (c) Make available to developers all relevant ordinances, post-construction requirements, design standards, checklists, and/or other materials.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
35.	Inventory of post-construction SCMs and low-density projects			
	Develop a comprehensive inventory of post-construction SCMs and low-density projects to be utilized for inspections and tracking.	1. Establish list of existing structural SCMs and low-density projects	1. Permit year 1-2	1. Number of SCMs and low-density projects inventoried

Table 20: Post Construction Site Runoff Control BMPs

		2. Issue letter of notification to owners making them aware of upcoming inspections	2. Permit year 3	2. Number of letters sent
		3. Add SCMs and low-density projects to inventory list when project as-builts are approved	3. See BMP No. 31.3	3. See BMP No. 31.3
36.	Inspection Tracking			
	Track the results of regular post-construction SCM and low-density inspections to provide documentation and the ability to identify chronic violators.	1. Establish inspection tracking mechanism to meet all requirements of BMP No. 31 (Permit 4.1.3)	1. Permit year 2	1. Yes/no/status
		2. Continuously update	2. Continuously, beginning in permit year 3	2. Yes/no/status
37.	Developer Resources			
	Establish a developer stormwater resources section on the city website so relevant materials are easily accessible for developers.	1. Upload links to ordinances, post construction requirements, link to design standards, and other relevant material to website	1. Permit year 1, in conjunction with stormwater website development	1. Yes/no/status, link to webpage
		2. Update when changes to resources occur	2. Continuously	2. Report date of updates and changes made
Permit Ref.	3.6.6: Fecal Coliform Reduction Measures to control, to the maximum extent practicable, sources of fecal coliform per 15A NCAC 02H .1017(7). At a minimum, the program shall include: (a) A pet waste management component, which may be achieved by revising an existing litter ordinance, and (b) An on-site domestic wastewater treatment system component, if applicable, which may be coordinated with local county health department, to ensure proper operation and maintenance of such systems.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
	This permit requirement is fully met by the existing post-construction program, see references provided in Table 19			

PART 10: POLLUTION PREVENTION AND GOOD HOUSEKEEPING PROGRAMS

This SWMP provides a comprehensive pollution prevention and good housekeeping strategy for the City of Newton municipal facilities and operations. Pollution prevention and good housekeeping is accomplished through the implementation of seven required programs, which collectively address the ultimate goal of preventing or reducing pollutant runoff from municipal operations such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and municipal storm sewer system maintenance.

Pollution prevention and good housekeeping for municipal operations includes the following programs:

1. Municipal Facilities Operation and Maintenance Program
2. Spill Response Program
3. MS4 Operation and Maintenance Program
4. Municipal SCM Operation and Maintenance Program
5. Pesticide, Herbicide and Fertilizer Management Program
6. Vehicle and Equipment Cleaning Program
7. Pavement Management Program

Currently, spill response procedures are handled by the Fire Department and all other components of the pollution prevention and good housekeeping measures are implemented by the Public Works Department. The City already provides street sweeping and leaf collection services to residents but will begin to quantify and monitor for assessment. Initially an inventory of municipal facilities will be completed to serve as a basis for developing the program and creating documentation for inspections. The City of Newton will manage, implement and report the pollution prevention and good housekeeping BMPs as specified in Table 21 below for each required program.

Table 21: Pollution Prevention and Good Housekeeping BMPs

Permit Ref.	3.7.1: Municipal Facilities Operation and Maintenance Program Measures to manage facilities that are owned and operated by the permittee and have the potential for generating polluted stormwater runoff. The permittee shall maintain a current inventory of municipal facilities; perform facility inspections and routine maintenance; establish specific frequencies, schedules, and standard documentation; provide staff training on general stormwater awareness and implementing pollution prevention and good housekeeping practices.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
38.	Inventory of Municipal Facilities			
	Develop and maintain an up-to-date inventory of municipal facilities with potential to generate polluted runoff.	1. Compile list of existing City-owned facilities	1. Permit year 1	1. Number of facilities inventoried; date list is completed
		2. Perform initial inspection of facilities for potential to generate polluted runoff or requiring spill response procedures. Classify facilities as having high or low potential for stormwater pollution	2. Permit year 2	2. Number of inspections performed and number of facilities classified as high potential and low potential
		3. Determine which facilities require a SPCC	3. Permit year 2	3. Number of SPCC Plans required
		4. Determine which facilities require a NPDES Industrial permit (See BMP No. 48)	4. See BMP No. 48	4. See BMP No. 48
		5. Update inventory as needed when facilities are added or closed	5. As required	5. Number of facilities added/revisions made
39.	Facility Inspections			
	Inspection of City facilities to confirm good housekeeping practices are being followed, including vehicle and equipment cleaning (See BMP No. 49) and that the City Public Works Complex is in compliance with Industrial Stormwater Permit NCG080669.	1. Establish a SOP for city facility inspections, including an inspection schedule, inspection report documentation, and tracking system	1. Permit year 2	1. Yes/no/status

Table 21: Pollution Prevention and Good Housekeeping BMPs

		2. Implement annual facility inspections for high stormwater pollution potential facilities and once per permit term inspections for low potential facilities, following SOP established in BMP No. 39.1	2. Annually conduct inspections, beginning in permit year 3	2. Number of inspections of high potential and low potential facilities performed
40.	Staff Training			
	Develop or identify a staff training program for general stormwater pollution prevention and provide to public works department employees (See BMP No. 43).	1. See BMP No. 43	1. See BMP No. 43	1. See BMP No. 43
Permit Ref.	3.7.2: Spill Response Program Measures for facilities and operations that store and/or use materials that have the potential to contaminate stormwater runoff if spilled. The permittee shall maintain written spill response procedures and train staff on spill response procedures.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
41.	Inventory of facilities with Spill potential			
	Maintain a list of city facilities and operations storing materials that would be a pollutant if spilled and introduced to the stormwater system and classify by hazard and quantity (See BMP No. 38.2).	1. Update list of city facilities and operations with spill potential when facilities or operations are changed	1. When necessitated by changes in facilities or operations	1. Number of additions or revisions
42.	Spill Response Procedures			
	Maintain spill response procedures and continue training of appropriate staff.	1. Review general spill response procedures	1. Permit year 1	1. Are procedures adequate? – yes/no/status
		2. Review specific spill response procedures for City facilities and operations with potential to produce high hazard spills	2. Permit year 1	2. Are procedures adequate? – yes/no/status
		3. Update as facilities and operations are revised	3. As required	3. Number of additions or revisions made
		4. Train new fire department staff in spill response procedures	4. As required	4. Number of new staff trained

Table 21: Pollution Prevention and Good Housekeeping BMPs

		5. Train staff at facilities with potential for high hazard spills in first response actions and reporting procedures	5. Annually	5. Number of staff trained
Permit Ref.	3.7.3: MS4 Operation and Maintenance Program Measures to minimize pollutants in the stormwater collection system. The permittee shall provide operation and maintenance staff training on stormwater awareness and pollution prevention, perform MS4 inspections, maintain the collection system including catch basins and conveyances; and establish specific frequencies, schedules, and standard documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
43.	Staff Training			
	Develop or identify a staff training program for general stormwater pollution prevention and provide to public works department employees	1. Develop or identify appropriate training program	1. Permit year 2	1. Yes/no/status
		2. Provide initial training for all employees	2. Annually, beginning in permit year 3	2. Number of staff members trained and topics from training
		3. Provide training for new hires	3. Annually, beginning in permit year 3, as necessitated by staffing changes	3. Number of new hires trained and topics from training
44.	MS4 System Inspections and Maintenance			
	A proactive plan for MS4 system maintenance, requiring regular inspections and maintenance.	1. Develop a SOP that includes proactive inspection schedules, standard documentation, staff responsibilities, and proper maintenance training	1. Permit year 2	1. Yes/no/status
		2. Perform regular inspections in accordance with the SOP	2. Following schedule established in SOP, once SOP and tracking system (See BMPs No. 44.1 and 44.4) are established	2. Number of inspections documented
		3. Verify, document, and prioritize maintenance activities identified by inspections or citizen reports	3. Continuously, as potential maintenance activities are identified	3. Number of maintenance activities performed

Table 21: Pollution Prevention and Good Housekeeping BMPs

		4. Develop an inspection and maintenance tracking system to be used in accordance with the SOP and to identify “hot spot” locations for system maintenance	4. Permit year 2	4. Yes/no/status
Permit Ref.	3.7.4: Municipal SCM Operation and Maintenance Program Measures to manage municipally-owned, operated, and/or maintained structural SCMs that are installed for compliance with the permittee’s post-construction program. The permittee shall maintain a current inventory of SCMs, perform SCM inspections and maintenance, and shall establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
45.	Inventory of Municipal structural SCMs			
	Development and maintenance of a current inventory of municipally owned structural SCMs.	1. Create an inventory of existing City-owned SCMs with information including type, year built, date of last inspection, and maintenance actions	1. Permit year 1	1. Number of municipal structural SCMs
		2. Compile, and develop as needed, Operation and Maintenance Plans for all City-owned SCMs	2. Permit year 2	2. Yes/no/status
		3. Update as necessitated by new City development	3. As required	3. Number of updates to list
46.	SCM Inspections and Maintenance			
	Performance and documentation of regular inspection and maintenance of municipally owned structural SCMs. Addition of municipally owned SCMs to MS4 map.	1. Locate City-owned SCMs and add them to the MS4 Map with type of SCM indicated	1. Permit year 1	1. Report the number and type of SCMs added to the map
		2. Update the map when new City-owned SCMs are constructed	2. Annually, once BMPs No. 45.1 and 46.1 are completed	2. Note annually whether new City-owned SCMs were added. If any are added, note number and type added as well as number and type of SCMs mapped to date
		3. Maintain NC SCM Inspections and Maintenance Certification for appropriate personnel	3. Continuously, beginning in permit year 2	3. Number of staff members with active certification
		4. Develop SCM inspection form	4. Permit year 2	4. Yes/no/status

Table 21: Pollution Prevention and Good Housekeeping BMPs

		5. Inspect each device using SCM inspection form	5. Annually, beginning in permit year 3	5. Number of SCMs inspected, number passing inspection, number requiring maintenance
		6. Perform maintenance tasks identified in inspections	6. As required	6. Number of SCMs maintained
		7. Develop a tracking document (See BMP No. 45)	7. Permit year 2	7. Yes/no/status
Permit Ref.	3.7.5: Pesticide, Herbicide and Fertilizer Management Program Measures to minimize water quality impacts from the use of landscape chemicals. The permittee shall provide routine pollution prevention and chemical use, storage and handling training, and shall ensure compliance with permits and applicator certifications.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
47.	Pesticide, Herbicide, Fertilizer Applicator Training			
	Training of City staff who apply landscape chemicals in order to minimize water quality impacts from pesticides, herbicides, and fertilizers.	1. Maintain Right-of-Way Pest Control, Public Health Control, and Ornamental & Turf Pest Control applicator certifications for appropriate personnel	1. Continuously	1. Yes/no/status
		2. Develop or identify pollution prevention and chemical use, storage and handling training program	2. Permit year 2	2. Yes/no/status
		3. Provide staff training in pollution prevention and chemical use, storage and handling training	3. Annually, beginning in permit year 3	3. Number of staff trained and topics covered

Table 21: Pollution Prevention and Good Housekeeping BMPs

Permit Ref.	3.7.6: Vehicle and Equipment Cleaning Program Measures to prevent and minimize contamination of stormwater runoff from areas used for municipal vehicle and equipment maintenance and/or cleaning. The permittee shall ensure that municipal industrial facilities subject to NPDES industrial permitting comply with those permit requirements, provide routine pollution prevention training to staff, perform routine inspections, and establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
48.	NPDES Industrial Permit Compliance			
	Ensure that NPDES industrial permit compliance occurs at all applicable municipally owned sites.	1. Review municipal facilities inventory to determine which facilities require a NPDES permit	1. Permit year 1	1. Number of facilities determined to require a NPDES Industrial Permit
		2. Permitting of municipally owned facilities; apply for new permits and confirm that all existing permits are valid. Renew permits as required	2. Permit year 1, following review of facilities, and continuously thereafter	2. Report number of new permits received or renewed as well as number of active permits.
		3. Develop a municipal industrial facility inspection form	3. Permit year 1	3. Yes/no/status
		4. Perform facility inspections for compliance with permit	4. Annually, after NPDES permits acquired	4. Number of inspections performed
		5. Establish NPDES Industrial Permit tracking mechanism to document list of municipally owned facilities with permit, permit expiration dates, and inspections	5. Permit year 1	5. Yes/no/status
49.	Vehicle and Equipment Cleaning and Maintenance Facility Inspection			
	Routine inspections as part of general facility inspections (See BMP No. 39) to ensure that vehicle and equipment facilities are following proper procedures to minimize water quality impacts from vehicle and equipment cleaning and maintenance.	1. Develop an inspection checklist	1. Permit year 2	1. Yes/no/status
		2. Perform inspections using inspection checklist and notify facility manager of any corrective actions required	2. Bi-annually, beginning in permit year 3	2. Number of inspections
		3. Perform re-inspections of any facility that required corrective action	3. As required by corrective actions issued	3. Number of facilities requiring corrective action, number of resolutions

Table 21: Pollution Prevention and Good Housekeeping BMPs

50.	Staff Training			
	Provide general stormwater awareness training and pollution prevention training to employees working in vehicle maintenance and cleaning areas (See BMP No. 43).	1. See BMP No. 43	1. See BMP No. 43	1. See BMP No. 43
Permit Ref.	3.7.7: Pavement Management Program Measures to reduce pollutants in stormwater runoff from municipally-owned streets, roads, and parking lots within the permittee's corporate limits. The permittee shall implement measures to control litter, leaves, debris, particulate and fluid pollutants associated with vehicles, and establish specific frequencies, schedules, and documentation.			
BMP No.	A	B	C	D
	Description of BMP	Measurable Goal(s)	Schedule for Implementation	Annual Reporting Metric
51.	Street Sweeping			
	Street sweeping following a regular schedule in order to reduce pollutants from City owned and maintained streets.	1. Develop a SOP, including a schedule and plan to document	1. Permit year 1	1. Yes/no/status
		2. Implement SOP and documentation	2. Annually, beginning in permit year 2	2. Total number of street miles swept
52.	Leaf Collection			
	Periodic collection of leaves from residential and public areas to reduce pollutants and clogging of storm system inlets.	1. Develop a SOP, including a schedule and plan to document	1. Permit year 1	1. Yes/no/status
		2. Implement SOP and documentation	2. Regularly, beginning in permit year 2	2. Volume of leaves collected (tons)
53.	Vehicle Spill Cleanup			
	An organized vehicle spill cleanup response to prevent pollutants from vehicular accidents from entering the storm drain system.	1. Maintain spill response procedures (See BMP No. 42)	1. See BMP No. 42	1. See BMP No. 42
		2. Provide public education about stopping vehicle leaks (See BMP No. 7.5)	2. See BMP No. 7.5	2. See BMP No. 7.5

